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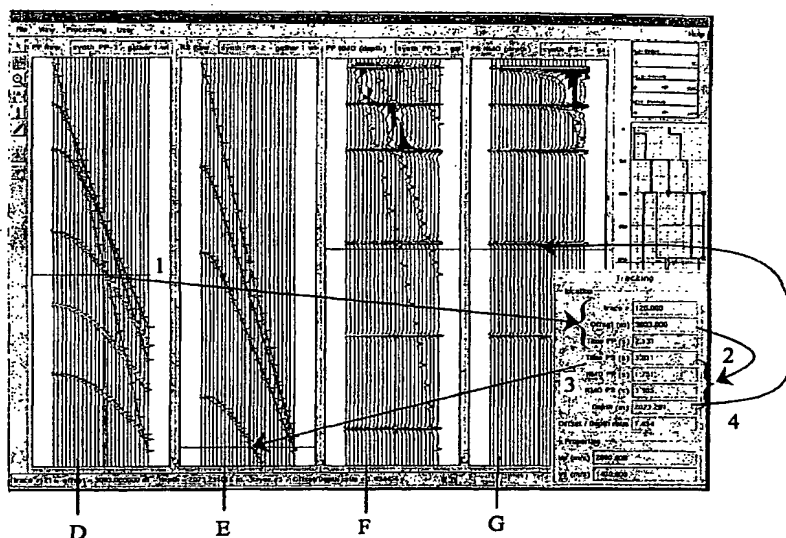
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(54) Title: PROCESSING SEISMIC DATA



(57) Abstract: A method of processing seismic data comprises identifying the value of a first parameter associated with an event in a first set of seismic data. The value of a second parameter associated with a corresponding event in a second set of seismic data is then obtained using at least one look-up table. The first parameter may be, for example, PP travel time with the first data set being a raw PP data set, and the second parameter may be, for example, PS travel time with the second data set being a raw PS data set or reflection depth. The invention makes it possible to identify pairs of corresponding PP and PS events in raw data traces. The look-up table(s) are obtained using an assumed model for the velocity of propagation of acoustic energy within the earth. The results of the method may be used in quality control, or may be used to correct the velocity model.

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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02 059647 A (SCHLUMBERGER CA LTD ;SCHLUMBERGER SERVICES PETROL (FR); CURTIS AND) 1 August 2002 (2002-08-01) page 12, line 1-20 page 15, line 16-25 figures 1-14	1,7-12, 18-22
X	WO 02 46792 A (SCHLUMBERGER CA LTD ;MUIJS REMCO (CH); SCHLUMBERGER SERVICES PETRO) 13 June 2002 (2002-06-13) column 4, line 64 -column 5, line 50 column 10, line 36 -column 11, line 7 figures 4,18	1,7-12, 18-22
A	US 5 229 939 A (SCHEIBNER DAVID J ET AL) 20 July 1993 (1993-07-20) column 8, line 19 -column 10, line 18 figures 4,7,9	1-22

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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